

**ABSTRACT**

Associated to the first product of each group or slug of products being formed is a first engagement element which follows the movement of advance of said first product, preventing it from falling forwards in the direction of advance. In such conditions, the products are made to advance according to a stacking path that is substantially horizontal, setting them up against the first product, and thus determining the formation of groups or slugs of products and counting the number of products stacked. When the number of products stacked reaches the desired value, the last product in the group is engaged by a second engagement element which exerts an action of thrust in a forward direction on the slug of products thus formed, so causing separation thereof from the first product of a new slug being formed in the stacking structure.

The stacking operation is performed on the products, which are set on edge after being tipped starting from a previous substantially horizontal position of advance. Preferably, the first retention element and the second retention element are inserted in the flow of the products in a position corresponding to the region in which the aforesaid movement of tipping the products into the on-edge position is performed.

A preferential application is for plants for automatic packaging of products, such as foodstuffs (Figure 7)